

**METHODS:** We examined the concentration of the pharmaceutical market by using the Herfindahl-Hirschmann Index. We calculated the index for 12 different medicine groups in 2002–2008. Ten of these groups were prescription medicines and two were self-care medicines. The index is calculated by summing up the squares of the market shares for all the firms operating in the medicine group. It is important that all medicines in each group can be substituted to each other. The index value varies between  $1/n - 1$ ,  $n$  = firms. Greater value of the HHI indicates greater concentration. If HHI is below 0.18 there is no concentration at all. **RESULTS:** In 2002 the total HHI average for the 12 groups was 0.30 as in 2008 it was 0.22. In anti-dementia drugs the index dropped from 0.48 to 0.23. In triptans the index dropped from 0.40 to 0.17. The smallest index was seen in antiallergics. In 2002 the index in this group was 0.14 and in 2008 it was 0.12. In 2008 the most concentrated group according to the index was the proton pump inhibitors. The index in this group was 0.38. **CONCLUSIONS:** From 2002 to 2008 the concentration in medicine groups has clearly diminished. The difference between these groups is partly due to patents. The two self-care medicine groups used in the study are clearly less concentrated than the prescription medicine groups. However, the average for all 12 groups is 0.22 and exceeds the index point of 0.18. This indicates that among the medicine groups used in calculations the market is still concentrated.

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#### LUMP SUM REIMBURSEMENT OF PHARMACEUTICALS IN HOSPITALS IN BELGIUM: ASSESSING THE ADVERSE EFFECTS

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**OBJECTIVES:** To examine if the introduction of a lump sum reimbursement system for pharmaceuticals in Belgian hospitals for hospitalized patients resulted in shifts in Health Insurance expenses (third party payer) for pharmaceuticals from an in-patient setting (hospitalized patients) to an out-patient setting (day clinic, public pharmacies,...), based on an analysis of financial data of NIHI. **METHODS:** In July 2006, a partial (approximately 75% of the expenses) lump sum reimbursement system was introduced for standard medication (excluding new expensive drugs, oncology, orphan drugs,...) fixing budgets per hospital, per hospitalization, based on patient profiles (APDRG, All patients Refined Diagnosis Related Groups) and financial data. Using registered financial data from NIHI the evolution of the Health Insurance expenses for pharmaceuticals in hospitals was examined. **RESULTS:** The yearly expenses for pharmaceuticals for hospitalized patients grew with +8.0%, +0.2%, -2.0%, -0.1% and +1.6% in the period 2003–2008. For patients in day clinic the growth was respectively +23.7%, +11.7%, +5.8%, +19.3% and +17.9%. For patients in public pharmacies these figures were +8.2%, +1.2%, -2.3%, +6.2% and +12.2%. **CONCLUSIONS:** Evaluation of the data shows no changes in the trend in evolution of the expenses for any type of patients other than leveling of the growth in the period 2005–2006—similar to the evolution of expenses for pharmaceuticals in the other OECD countries—and a additional growth in expenses in public pharmacies (+6.2%) due to the inclusion of self-employed persons in the general system for compulsory health insurance in 2008. Analysis shows no shifts in expenses from one setting to another.

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#### PHARMACEUTICAL EXPENDITURE AND POTENTIAL AVENUES FOR COST CONTAINMENT IN IRELAND

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**OBJECTIVES:** In view of the 6-fold increase in drug expenditure over the past decade in Ireland, we set out to identify primary areas of utilisation and expenditure under the Community Drugs Schemes and explore strategies for cost containment. **METHODS:** We examined the *Statistical Analysis of Claims and Payments for 2007/2008* from the Primary Care Reimbursement Service (PCRS). This is a definitive measure of general practitioner prescribing rates and enabled us to determine utilization and expenditure. We applied the autoregressive integrated moving average (ARIMA) model to the national prescribing database to predict future expenditure on medicines. **RESULTS:** In 2008 expenditure under the Community Drugs Schemes was €2.289 billion with over 60.5 million prescription items. The ARIMA model predicts that expenditure will continue to rise reaching €2.3–€3 billion by 2012. The 60.5 million prescription items are distributed as follows: General Medical Services Scheme (GMS) 73%, Long Term Illnesses Scheme 4% (both free to patients), Drug Payments Scheme 22%, High Technology Drugs and others account for the remaining 1%. The major therapeutic classifications by cost under the GMS are Cardiovascular System 23.9%, Nervous System 20.5%, Alimentary Tract and Metabolism 15.4%. Cost containment measures could include: increasing generic drug utilisation rates from 18.3% (2.4% unbranded, 15.9% branded; EU average ~50%); decreasing wholesale margin from 15%; changing current drug schemes by introducing disinvestment measures and patient co-payments; reducing the pharmacy 50% mark-up and introducing reference pricing whilst continuing to reward innovation. **CONCLUSIONS:** It is clear that the current trend of increasing drug expenditure will continue and the measures we have suggested above would be efficient strategies for cost containment.

#### INTERNATIONAL PAYER RESEARCH: COMPARING AND CONTRASTING PAYER ROLES AND RESEARCH METHODS IN CANADA, SPAIN, AND THE UK

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**OBJECTIVES:** Global pharmaceutical companies often conduct coordinated, multi-country studies to elicit information from payers and those who influence their decisions. Such studies can influence global product value strategy and increase the likelihood of positive pricing and reimbursement (P&R) decisions. Differences in P&R systems across markets must be considered. The aim of this study was to compare payer roles in three pharmaceutical markets (UK, Spain, Canada), and to evaluate the usefulness of various qualitative research methods in eliciting information to inform a global product value strategy. **METHODS:** We conducted a review of publicly available guidance and qualitative payer research to develop a framework for comparing optimal approaches to qualitative payer research. We compared the levels at which pricing, reimbursement, and market access decisions are made (e.g., national, regional, local, hospital), bodies influencing payer decisions (e.g., health technology assessment agencies), and the processes of engagement among physicians, patients, and payers. Implications of various qualitative and quantitative research techniques on a pharmaceutical company's ability to devise an effective global strategy are discussed. **RESULTS:** Treatment location (outpatient drug, hospital only) and type of prescriber must be considered when determining the research strategy in Spain. In Canada, provincial drug plans make reimbursement decisions for outpatient drugs considering Common Drug Review recommendations. Hospital formulary committees assess drugs for hospital use. NICE, the Scottish Medicines Consortium and the All Wales Medicines Strategy Groups make decisions at the national level in the UK while Primary Care Trusts make funding decisions in the absence of NICE appraisal in England. **CONCLUSIONS:** For multi-country payer research to be useful for devising a global value strategy it is important to understand the pricing and reimbursement systems in different countries and to identify properly the key stakeholders.

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#### THE RAPID ADOPTION OF HEALTH TECHNOLOGY ASSESSMENT IN MIDDLE INCOME COUNTRIES—WHAT INFLUENCE DOES IT HAVE ON PHARMACEUTICAL REIMBURSEMENT. RESULTS FROM A SURVEY OF HEALTH CARE DECISION-MAKERS IN 11 COUNTRIES

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**OBJECTIVES:** Assessment of health technology (HTA), including pharmaceuticals, devices, procedures and organizational systems plays an increasingly important role in health care systems by providing structured, evidence-based input to policy-making. HTA is firmly established in Europe, North America and Australasia, and is growing rapidly in Asia and Latin America. We investigated the organisation and influence of HTA in middle-income countries on real decision-making over pharmaceutical budgets. **METHODS:** We selected middle-income countries where HTA activities are established to some extent: Argentina, Brazil, China, Colombia, Israel, Mexico, Philippines, Korea, Taiwan, Thailand, and Turkey. We collected and reviewed relevant information to describe the health care and reimbursement systems and how HTA relates to coverage decision making of pharmaceuticals using a common template. The country profiles were supplemented by information from a structured web-survey among professionals working in public and private health insurance, industry, regulatory authorities, ministries of health, academic units or HTA agencies. **RESULTS:** The use and implementation of HTA recommendations in reimbursement decision-making is still in its early stages. We found that in South Korea, Taiwan, Brasil and Mexico HTA was more developed, with guidelines for manufacturers submissions, a link to the pricing of new treatments and some requirement for data to be adapted for local costs epidemiology. **CONCLUSIONS:** The study provides evidence of the development of HTA in coverage decision making in middle-income countries. Increased health care spending and the resulting access to modern technology give a strong impetus to HTA. The assessment and regulation of pharmaceuticals are advanced in relation to other technologies. HTA is developing with uneven speed in middle-income countries; many countries are building on the organisational and methodological experience from established HTA agencies in Europe, Australia and Canada.

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#### WTP FOR A QALY: THE INDIVIDUAL PERSPECTIVE

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**OBJECTIVES:** Elicit the individual willingness to pay (WTP) for a QALY. **METHODS:** Web-based contingent analysis included 1091 respondents, representative of the Dutch population. Individuals solved 5 scenarios with two health states each. They initially valued health states on VAS scale, then indicated which health state was worse and finally expressed their WTP for avoiding a given decline in health. WTP was elicited in an open-ended format and from a payment scale. Respondents had to indicate the degree of certainty in the answers provided. WTP/QALY was calculated one for every utility elicitation technique, WTP elicitation technique (payment scale and open-ended questions) and each scenario. The heterogeneity in WTP/QALY ratios was examined from the perspective of 1) household income, and 2) the level of certainty in WTP